

WHAT IS CLAIMED IS:

1. A message processing device, comprising:
 - a message receiving unit for receiving a message having a header including a valid duration and a body including data to be transmitted;
 - a duration determination unit for determining whether or not the message is within the valid duration when the message receiving unit receives the message;
 - a message transferring unit for transferring the message when the duration determination unit gives a positive result; and
 - an application processing unit for reading out data included in the body to execute predetermined processing when the duration determination unit gives a positive result.
2. A message processing device according to claim 1, the header further including a valid zone;
 - the message processing device further comprising:
 - a zone determination unit for determining whether or not the message processing device is within the valid zone when the message receiving unit receives the message,
 - wherein the message transferring unit transfers the message when the duration determination unit and the zone determination unit give positive results, and the application processing unit reads out the data included in the body to execute predetermined processing when the duration determination unit and the zone determination unit give positive results.
3. A message processing device according to claim 2, further comprising:
 - a position detecting unit for detecting a current location of the message processing device,
 - wherein the determination of the zone determination unit is based on a detection result of the position detecting unit.

4. A message processing device according to claim 1, the header further including a flag and a valid zone, the flag being set when the message reaches the valid zone, the message processing device further comprising:

a zone determination unit for determining whether or not the message processing device is within the valid zone when the message receiving unit receives the message,

wherein the message transferring unit transfers the message when the duration determination unit and the zone determination unit give positive results, or when the duration determination unit gives a positive result, the zone determination unit gives a negative result, and the flag is not set; and the application processing unit reads out data included in the body when the duration determination unit and the zone determination unit give positive results.

5. A message processing system between a plurality of vehicles, each vehicle having the message processing device of claim 1, and a message being transmitted and received among the plurality of vehicles.

6. A message processing device, comprising:

a message receiving unit for receiving a message having a header including a valid zone and a body including data to be transmitted;

a zone determination unit for determining whether or not the message processing device is within the valid zone when the message receiving unit receives the message;

a message transferring unit for transferring the message when the zone determination unit gives a positive result; and

an application processing unit for reading out data included in the body to execute predetermined processing when the zone determination unit gives a positive result.

7. A message processing device according to claim 6, further comprising:

a position detecting unit for detecting a current location of the message processing device,

wherein the determination of the zone determination unit is based on a detection result by the position detecting unit.

8. A message processing device, comprising:

a valid duration setting unit for setting a valid duration;

an application processing unit for generating data to be transmitted;

and

a message transmitting unit for transmitting a message having a header including the valid duration set by the valid duration setting unit and a body including the data generated by the application processing unit.

9. A message processing device according to claim 8, further comprising:

a zone setting unit for setting a valid zone,

wherein the header further includes the valid zone set by the zone setting unit.

10. The message processing device of claim 9, wherein the zone setting unit sets a range between intersections along a road as the valid zone when a plurality of the intersections are specified.

11. The message processing device of claim 9, wherein the zone setting unit sets a range of a road specified by a road name as the valid zone when the road name is specified.

12. The message processing device of claim 8, further comprising:

a zone setting unit for setting a valid zone,

wherein the header further includes the valid zone set by the zone setting unit and a flag set when the message reaches the valid zone.

13. The message processing device of claim 12, wherein the zone setting unit sets a range between intersections along a road as the valid zone when a plurality of the intersections are specified.

14. The message processing device of claim 12, wherein the zone setting unit sets a range along a road specified by a road name as the valid zone when the road name is specified.

15. A message processing device, comprising:
a zone setting unit for setting a valid zone;
an application processing unit for generating data to be transmitted;
and
a message transmitting unit for transmitting a message having a header including the valid zone set by the zone setting unit and a body including the data generated by the application processing unit.

16. The message processing unit of claim 15, wherein the zone setting unit sets a range between intersections along a road as the valid zone when a plurality of the intersections are specified.

17. The message processing unit of claim 15, wherein the zone setting unit sets a range of a road specified by the road name as the valid zone when the road name is specified.

18. The message processing device in claim 15, wherein the zone setting unit sets a geographical range specified by an administrative district name as the valid zone when the administrative district name is specified.

19. The message processing device in claim 15, wherein the zone setting unit sets a geographical range enclosed by a plurality of points as the valid zone when a plurality of the points are specified.

20. The message processing device according to claim 15, further comprising:

a navigation device for displaying a map,
wherein the zone setting unit sets the valid zone through a map
display screen displayed by the navigation device.